IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claim 1 and cancel claim 10 as follows:

1. (CURRENTLY AMENDED) An interface device for performing data transmission with a further device coupled to a network at any of a plurality of transmission rates that are regulated, the interface device comprising:

a transmission rate control circuit configured to generate a switch signal that changes an operation speed of the interface device when the transmission rate must be switched;

a clock generation circuit configured to change a frequency in response to the switch signal and generate a clock signal having the changed frequency; and

a register adapted to store first information of a transmission capacity of the interface device itself, second information of a transmission rate that is presently possible, and third information of a transmission rate to be switched to next,

wherein the interface device negotiates with the further device using the first, second, and third information to determine a transmission rate, and the transmission rate control circuit changes the operation speed of the interface device in accordance with the determined transmission rate,

wherein the register stores information for a mode for maintaining the present transmission rate after a bus reset, which occurs after data transmission according to the determined transmission rate, or information for a mode for switching to a transmission rate enabling a minimum speed transmission operation after a [[bust]]bus reset, as fourth information, and

wherein the fourth information is transferred to the further device from the interface device during the negotiation.

2. (ORIGINAL) The interface device of claim 1, wherein the switching of the transmission rate is executed when data transmission to the further device is required or when a

request to switch to a different transmission rate is received from the further device.

3 (ORIGINAL) The interface device of claim 1, wherein the transmission rate control circuit switches to a transmission rate enabling low-speed transmission during low-speed transmission and switches to a transmission rate enabling high-speed transmission when high-speed transmission is required.

4. (ORIGINAL) The interface device of claim 1, wherein the transmission rate control circuit switches to a transmission rate enabling minimum speed transmission operation when starting operation for connection to the network or when data is not being transmitted.

5. (CANCELLED)

6. (CANCELLED)

7. (previously presented) The interface device of claim 1, wherein the information stored in the register is changeable by a bus reset.

8-9. (cancelled)

10. (cancelled)

11. (previously presented) A method, comprising:

configuring a transmission rate control circuit to change operation speed of at least one of a plurality of devices when a transmission rate must be switched;

changing the operation speed of the at least one of the plurality of devices based on the configured transmission rate control circuit;

registering first information of a transmission capacity of a device itself, second information of a transmission rate that is presently possible, and third information of a transmission rate to be switched to next,

wherein said configuring the transmission rate control circuit includes configuring the transmission rate control circuit to generate a switch signal that changes the operation speed of the at least one of a plurality of device, the method further comprising:

configuring a clock generation circuit to change a frequency in response to the switch signal to generate a clock signal having the changed frequency; and

the plurality of devices negotiating with each other using the first, second, and third information to determine a transmission rate,

wherein registering the first, second, and third information includes registering information for a mode for maintaining the present transmission rate after a bus reset, which occurs after data transmission according to the determined transmission rate, or information for a mode for switching to a transmission rate enabling a minimum speed transmission operation after a bus reset, as fourth information, and

wherein the fourth information is transferred to other devices from the at least one of the plurality of devices during the negotiation.

12-13. (cancelled)

14. (previously presented) The interface device according to claim 1,

wherein the interface device rewrites the second information of the transmission rate that is presently possible into the third information of the transmission rate to be switched to next when a bus reset is performed.

15. (previously presented) The interface device according to claim 1,

wherein the interface device sends the second information of the transmission rate that is presently possible instead of the third information of the transmission rate to be switched to next when maintaining a transaction presently being executed, and rewrites the third information of the transmission rate to be switched to next into information of a transmission rate requested by the further device when not maintaining the transaction presently being executed.

16. (previously presented) The method according to claim 11 further comprising of rewriting the second information of the transmission rate that is presently possible into the third information of the transmission rate to be switched to next when a bus reset is performed.

17. (previously presented) The method according to claim 11 further comprising of:

sending the second information of the transmission rate that is presently possible instead of the third information of the transmission rate to be switched to next when maintaining a

transaction presently being executed; and

rewriting the third information of the transmission rate to be switched to next into information of a transmission rate requested by the other devices when not maintaining the transaction presently being executed.